

Title (en)
LATERALLY COUPLED BAW FILTER EMPLOYING PHONONIC CRYSTALS

Title (de)
LATERAL GEKOPPELTES BAW-FILTER MIT PHONONISCHEN KRISTALLEN

Title (fr)
FILTRE BAW A COUPLAGE LATERAL UTILISANT DES CRISTAUX PHONONIQUES

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Application
EP 11769851 A 20111010

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Abstract (en)
[origin: WO2012049126A1] The invention relates to an acoustic-wave passband filter comprising at least two volume-acoustic-wave resonators that are acoustically coupled to each other laterally, each resonator comprising a layer (Piezo) of piezoelectric material and at least one first electrode (Es1, Es2, Es) and/or a second electrode (Ei1, Ei2, Es), said volume waves propagating in a direction perpendicular to the plane of the layer of the piezoelectric material, characterized in that: the filter furthermore comprises at least one first phonic crystal structure (CP1) placed between said resonators so as to decrease the transmission coefficient of the lateral acoustic waves in a direction parallel to the plane of the piezoelectric layer; and the first phonic crystal structure is produced in a matrix of dielectric material or with patterns of dielectric material.

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